

Name: **HELAN SATISH**
 Designation: Assistant Professor
 Department: E.C.E
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 Experience (in years): 16 years 6 months
 Research: 6 years



1. Educational / Technical qualifications:

S.No	Level (UG / PG / Ph.D)	Year of passing	Specialization
1	Ph.D	Pursuing	Biomedical Engineering
2	M.E	2006	Applied Electronics
3	B.E	2004	E.C.E

2. Teaching and Learning:

- 2.1. Teaching Interests: Neural Networks and Deep Learning, Control Systems, Signals and Systems, Probability Theory and Stochastic Processes, Switching Theory and Logic Design, Biomedical Engineering, Electronic Devices and Circuits, Linear and Digital Integrated Circuits, Embedded Systems, Embedded Real Time Operating Systems.
- 2.2. Novel Teaching & Learning Techniques adopted: Chalk and talk, Flipped Classroom, WIT and WIL, POGIL, Lab Protocol, Group Discussion, Open Notebook test.
- 2.3. Involvement in curriculum updating / Design: Yes

3. Co-curricular and Extra-Curricular Activities

- 3.1. Interests and Hobbies: -
- 3.2. CCA/ECA Organized: Coordinator for VJ Teatro (2012 to 2017, 2021 to present)
- 3.3. CCA/ECA participated: Involved in Intramurals and Sintillashunz
- 3.4. Counseling and Mentoring Activity: As mentor for 10 students from each year of ECE.
- 3.5. Committees involved in:
 Department level: Result Analysis In-charge (2007 to 2017), EDC Lab In-charge (2008 to 2017), Prepared Embedded C Lab Protocol (2015-2016), Anti Ragging, Prepared EDC Lab Manual (2021-2022), AQAR 2020-2021 Department Coordinator, Academic Audit 2021-2022 Department Coordinator, Editor of ECE Newsletter (ELECTROCOMM-IN-VISION).
 Institute Level: Stock Verification, Academic Audit, VJ Teatro Faculty Coordinator, Event Scheduling and Conduction Committee (Sports Fest, Cultural Day and Annual Day AY2021-22), Event Scheduling, Conduction and Pass Distribution Committee (Cultural Day and Annual Day AY2022-23).

4. Conference / Workshop / Seminar / Guest Lectures:

- 4.1 Conducted:-
- 4.2 Attended:
 - A Short Term Training Program on Real Time Signal Processing & Image Processing of 2 weeks at VNR VJIET during June 2011. Sponsored by AICTE.
 - FDP on ARM Processors in Sept 2013.
 - Workshop on Texas Analog design in Oct 2013.
 - Two days TEQIP Sponsored workshop on “PCB designing of electronic circuits” in VNR Vignana Jyothi Institute of Engineering & Technology, Hyderabad from 22nd & 23rd FEB 2013.
 - FDP on CLOUD COMPUTING Feb 2013.
 - 2 week AICTE Sponsored Workshop on “Trends in Wireless communication and

Evolution of Simulation tools” conducted from 11th May to 23rd May 2015.

- 2 day workshop on "POGIL FOR OUTCOME BASED EDUCATION" on Dec 2014.
- Workshop on Real time systems
- Workshop on LABVIEW in 2015
- Workshop on MATLAB in 2015
- Seminar on Image Fusion techniques in 2016 (27.01.2016)
- FDP on Trends in Image and Video Processing (MGIT) in 2016 from 22-27 February
- FDP on Molecular Modelling and In-silico Drug Designing." from 23/08/2021 to 27/08/2021 at St. Joseph's College of Engineering.
- International workshop on “Networks and Dynamical Systems” organized by the Complex Systems and Dynamics Group, Indian Institute of Technology Madras from 25.08.2021 to 28.08.2021.
- FDP on "Computers and Automation in Life-Sciences Based Research" from 30/08/2021 to 03/09/2021 at Institute of Chemical Technology.
- FDP on "Computing Constructs for Modelling Biology" from 04/10/2021 to 08/10/2021 at JNN College of Engineering.
- One Week Workshop on Design Thinking conducted by CPADT VNRVJIET from 17.01.2023 to 21.01.2023.
- One week FDP on “Application of Computer Vision using Deep Learning” conducted by the department of Electronics and Communication Engineering SeshadriRao Gudlavalleru Engineering College from 20.02.2023 to 25.02.2023.

5. Academic Contribution and Research & Consultancy:

5.1. Invited Lectures:-

5.2. Articles/Chapters published in Books:

1. Reentry in cardiac ventricular epicardial tissue due to SCN5A L812Q gene mutation: a computational study, Biomedical Physics & Engineering Express, [10.1088/2057-1976/ac605c](https://doi.org/10.1088/2057-1976/ac605c)
2. A Simulation Study on Propagation of Action Potential in Epicardial Tissue Due to SCN5A L812Q Gene Mutation, Recent Advances in Applied Mechanics, [10.1007/978-981-16-9539-1_4](https://doi.org/10.1007/978-981-16-9539-1_4)

5.3. Books published as single author or as editor:-

5.4. Projects Guided:

- a) UG: 10
- b) PG: 6

5.5. Research Interests: Biomedical Engineering, Neural Networks and Deep Learning.

5.6. Ph.D students:

- a) Enrolled:
- b) Submitted:
- c) Awarded:

5.7. Papers published in reviewed Journals:

S.No	Title of the Paper	Journal Name Vol.No. PP	ISBN/ISSN No.	Impact Factor/ Citation Index	National/ International
1	An Improved Inverter Based Double-Tail Comparator for Ultra Low-Voltage Circuits	International Journal of Advanced Research in Electrical, Electronics and Instrumentation	ISSN (Print) : 2320 – 3765 ISSN (Online): 2278 – 8875		International

		Engineering, Vol. 4, No8			
2	Reentry in cardiac ventricular epicardial tissue due to SCN5A L812Q gene mutation: a computational study	Biomedical Physics & Engineering Express	Online ISSN: 2057-1976		International
3	A Simulation Study on Propagation of Action Potential in Epicardial Tissue Due to SCN5A L812Q Gene Mutation	Recent Advances in Applied Mechanics	Online ISBN978-981-16-9539-1		
4	Computational Study on Effect of KCNQ1 P535T Mutation in a Cardiac Ventricular Tissue	The Journal of Membrane Biology	Electronic ISSN 1432-1424		International

5.8. Papers presented at National / International **conferences:**

S.No	Title of the Paper	Names of the Conference/ Seminars	National/ International	Period
1	Secret Key Estimation In Sequential Steganography	AICTE Sponsored	National	2006
2	Computational Study of SCN5A L812Q Gene Mutation in Epicardial Cells	2020 IEEE-EMBS Conference on Biomedical Engineering and Sciences (IECBES)	International	2021
3	A Simulation Study on Electrical Activity of Ventricular Endocardial Tissue due to SCN5A L812Q Mutation	2021 43rd Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC)	International	2021
4	An In-Silico Study on Effect of KCNQI P535T Mutation in Cardiac Ventricular Cells	2022 IEEE-EMBS Conference on Biomedical	International	2022

		Engineering and Sciences (IECBES)		
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5.9. Sponsored research Projects: Nil

5.10 Consultancy Projects: Nil

6. Awards / Honors received:-

7. Motto: Simplicity is the ultimate Sophistication.